

1. (Fourth Amended)

A method of manufacturing a thin film chip resistor with a moisture barrier comprising:

~~EX~~ depositing a non-tantalum metal film resistive layer directly overlaying and attaching to a thin

film chip resistor substrate;

Sub attaching a chip resistor termination on each end of the metal film resistive layer; and

FI depositing the moisture barrier comprising a layer of tantalum pentoxide film directly overlaying

and attaching to the metal film resistive layer to reduce failures due to electrolytic

corrosion under powered moisture conditions.

15. (Thrice Amended)

A method of manufacturing a thin film chip resistor with a moisture barrier comprising:

~~EX~~ depositing a non-tantalum metal film resistive layer directly overlaying and attaching to a

substrate;

Sub attaching a chip resistor termination on each end of the metal film resistive layer;

FI depositing a passivation layer directly overlaying and attaching to the metal film layer; and

depositing the moisture barrier comprising a layer of tantalum pentoxide film directly overlaying

and attaching to the passivation layer for reducing failures due to electrolytic corrosion

under powered moisture conditions.